



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI
1201 ELM STREET
DALLAS, TEXAS 75270

JAN 21 1981

Mr. William B. Philipbar, Jr., President
Rollins Environmental Services, Inc.
One Rollins Plaza
Wilmington, Delaware 19899

Dear Mr. Philipbar:

Based on the results of test burns conducted at your facility in October 1979 and August 1980, I hereby grant approval to you to incinerate PCBs at the Rollins Environmental Services facility at Deer Park, Texas, under the authority of Section 6 of the Toxic Substances Control Act. The approval is subject to the conditions specified in the attachment to this letter.

Violation of any condition included as part of the approval will subject Rollins to enforcement action under the appropriate statute and/or termination of the approval. Furthermore, this approval may be withdrawn or further conditions may be added anytime I feel that the operation of the incinerator presents an unreasonable risk of injury to health or the environment from PCB incineration. This approval shall be effective on March 4, 1981.

If you have any questions, please contact me.

Sincerely,

A handwritten signature in cursive script that reads "Adlene Harrison".

Adlene Harrison
Regional Administrator

cc: Governor Bill Clements
State of Texas

Mr. Bill Stuart, Director
Texas Air Control Board

Mr. Harvey Davis, Director
Texas Department of Water Resources

Condition for Incineration of Liquid PCBs
at Rollins Environmental Services
of Deer Park, Texas

1. At all times during PCB incineration the incinerator shall meet the requirements specified in 40 CFR 761.40(a).
2. The PCB feed rate shall not exceed an average of 2439 lbs/hr calculated over the actual period of incineration of the PCB material.
3. The CO₂ level shall be measured every 24 hours during PCB incineration.
4. The flow of PCBs to the incinerator shall stop automatically under any of the following conditions:
 - a. the temperature drops below 1150°C at the exit end of the combustion zone,
 - b. the CO level shall not exceed 10 times the CO₂ level, and in any event shall not exceed 100 ppm (calibrate monitors every 24 hours during PCB incineration by zero and span gas), or
 - c. the O₂ drops below 3% (monitors shall be calibrated every 24 hours by zero and span gas).
5. The water scrubber shall at least achieve 99% HCl removal efficiency, and shall not emit greater than 40 lbs/hr HCl. Chlorine input shall be determined by the appropriate ASTM method. Stack gases shall be sampled using impingers containing NaOH, and analyzed for chloride using the Argentimetric method as specified in Standard Methods for Water and Waste Water, current edition.
6. Total particulate emission shall not exceed State emission limit for particulate emissions during PCB incineration.
7. All records and data shall be maintained in accordance with 40 CFR 761.45(b), (c), and (f).
8. All PCB storage facilities shall comply with 40 CFR 761.42. These requirements include implementation of an SPCC Plan for PCB storage and feed tanks as described under 40 CFR 761.42(7)(ii).
9. Any PCB container used for PCB transport, storage, or disposal shall not be used for any other purpose unless decontamination of the container complies with 40 CFR 761.43. All decontamination wash fluids shall be incinerated.
10. All PCB articles, equipment, and containers shall be properly marked according to 40 CFR 761.44.

11. Rollins shall comply with NPDES requirements for PCB discharges.
12. Rollins shall comply with all State and local permits for the incineration of wastes during PCB incineration.
13. Rollins personnel safety requirements and procedures for PCB handling, storage, transport, and disposal shall comply with OSHA requirements.
14. Any violation or noncompliance with the conditions referenced herein may result in suspension or revocation of the final approval for incineration of PCBs.
15. Rollins must comply with 40 CFR Part 265 and Part 122 of the May 19, 1980, Hazardous Waste Regulations ("Interim Status Standards" and "RCRA Hazardous Waste Permit Regulations").
16. EPA may require annual testing or monitoring of the facility for PCBs, HCl, particulates and up to 3 organics identified by EPA. Written reports discussing the results of the testing or monitoring shall be submitted to EPA within 180 days. Any modification to the approved facility which may result in increased or changes in types of emissions may require additional testing or monitoring.
17. Rollins must maintain a negative draft sufficient to prevent fugitive emissions from the kiln or after burners.
18. Should an Air Stagnation Advisory be issued which includes Harris County, Texas the facility shall upon notification by EPA or the State cease incineration of PCBs until an "all clear" is issued in accordance with the Texas SIP.
19. Rollins will through contractual agreement, hire a private engineering company to conduct regular monitoring of the Rollins facility. The selection of the private engineering company must be approved by EPA, Region 6. The contract scope of work shall at least include the scope of work prepared by EPA, Region 6 in order to ensure that all monitoring as a condition of the approval is included. The private engineering company will monitor the Rollins facility and will report the monitoring results to EPA. The contract scope of work and reporting will be in accordance with the attached Scope of Work for Monitoring. This condition must be satisfied prior to incineration of PCBs under this approval.
20. The conditions of this authorization are severable, and if any provision of this authorization, or any applications of any provision, is held invalid, the remainder of this authorization shall not be affected thereby.

Comparison of PCB Commercial Facilities, Region VI
Rollins-Deer Park, Texas vs. ENSCO-El Dorado, Arkansas

| Parameter | ENSCO | Rollins |
|--|--|--|
| Kiln Type | Rotary | Rotary |
| Kiln Dimensions | d=6.5ft., l=36ft, v=1194ft ³ | d=11.8ft., l=34ft., v=3718ft ³ . |
| Gas Flow Measurements | Calculation | Fan Curve and Hot Wire Anemometer |
| Ash Buildup | Approx. 1ft. in after- burner every 60-90 days- lowers dwell time 8-10%. | Approx. 1ft. in afterburner every 60 days: lowers dwell time 8% (very conservative estimate). |
| Maintenance | About every 30 days. Ash clean-out every 90 days. | About every 30 days. Ash clean-out about every 90 days. |
| Calculated Dwell Time: | | |
| $t = \frac{\text{incinerator volume}}{\text{ACFM combustion gases}}$ | 2.2 - 3.0 seconds | 2.2 - 2.8 seconds |
| Authorized Operating Conditions: | | |
| Feed Rates, lbs./hr. | 3700 total, 1245 to boiler, | 2439 solids or liquids. |
| Temperature, °C | 1100 minimum | 1150 minimum |
| Carbon Monoxide, ppm. | 10 X % CO ₂ | 10 X % CO ₂ , <100ppm |
| Oxygen, % | >3 | >3 |
| Thermocouple | End of secondary combustion chamber. | Hot duct downstream from afterburner. |

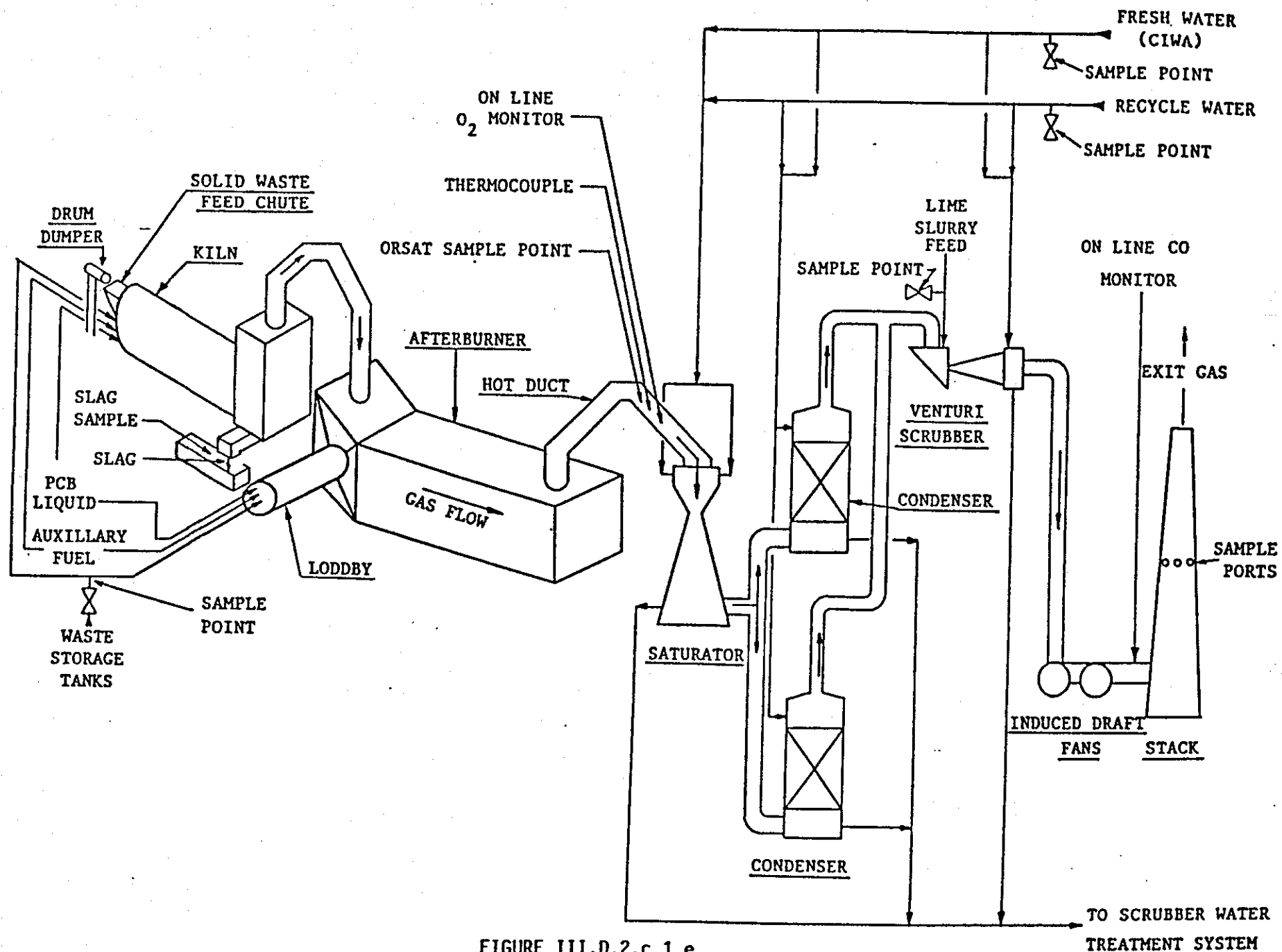


FIGURE III.D.2.c.1.e.
SAMPLE LOCATIONS FOR RES(TX) INC.
TRAIN 1 INCINERATOR

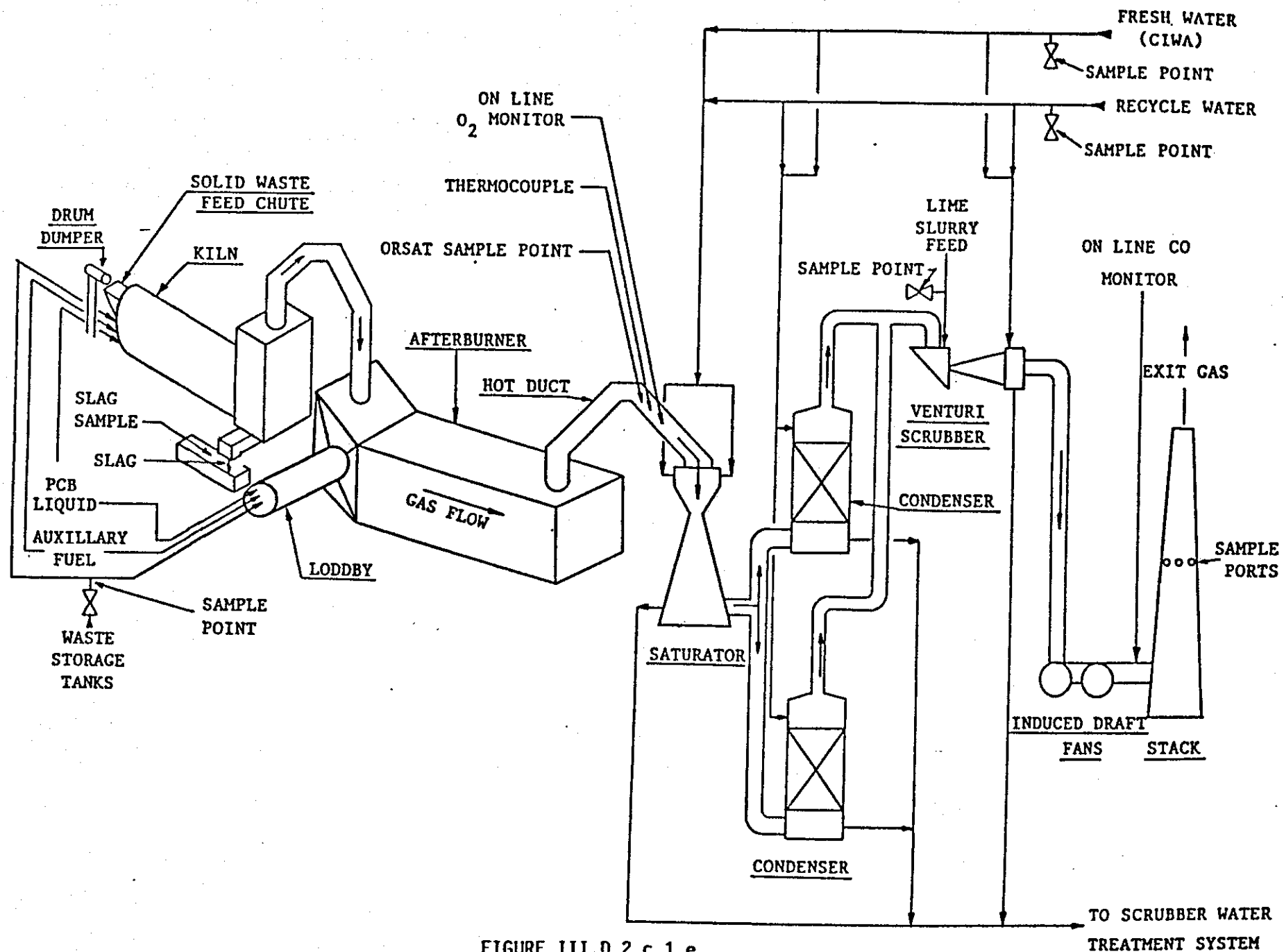


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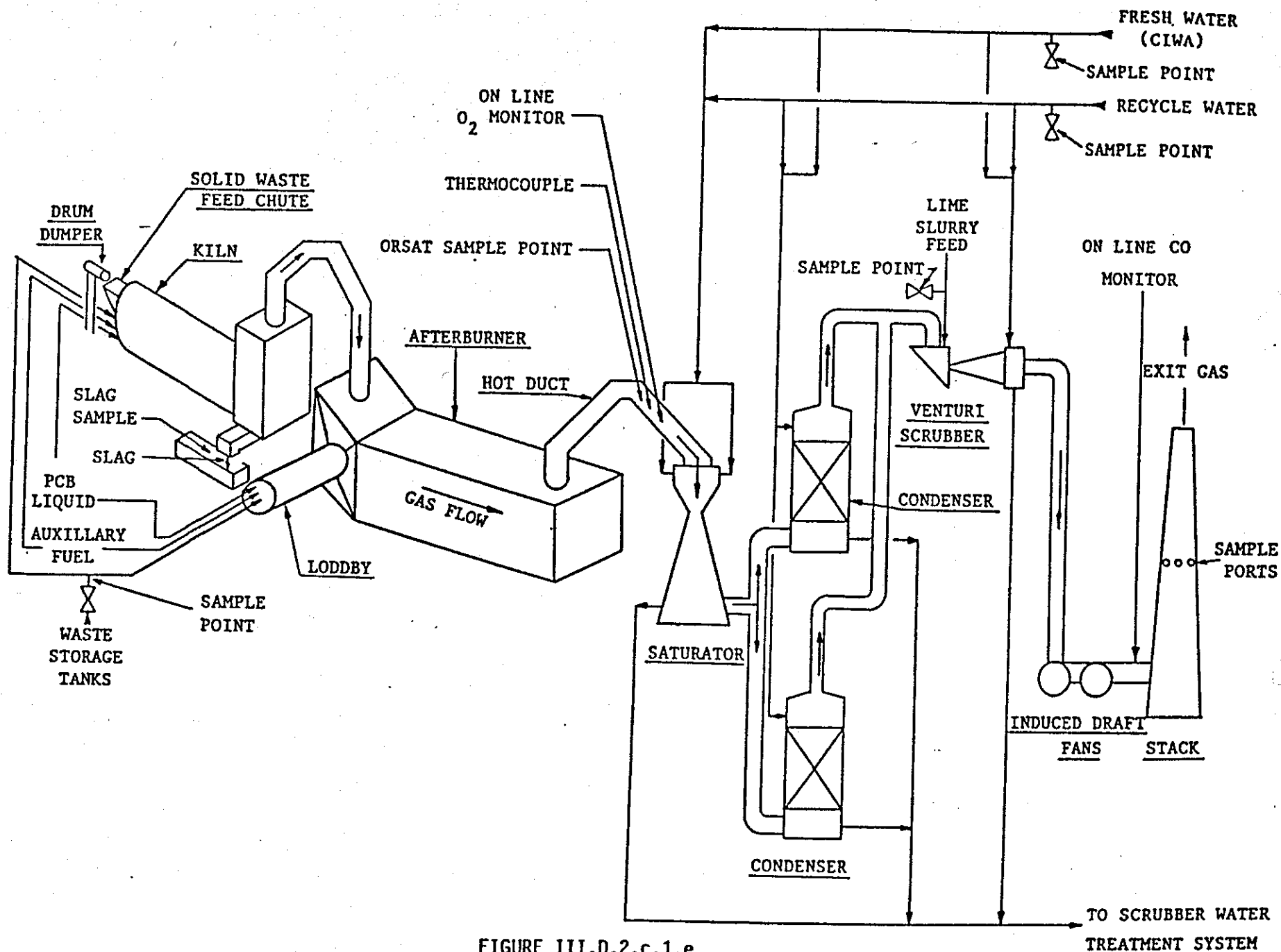


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